

05/20  
10/28

Page 1 of 8

#10

OIPE

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/824,787B

DATE: 11/12/2001  
TIME: 18:33:38

Input Set : A:\seqlist\_1821 0040001.txt  
Output Set: N:\CRF3\11122001\I824787B.raw

ENTERED

(P-5)

4 <110> APPLICANT: Zauderer, Maurice  
5 Evans, Elizabeth E.  
6 Borrello, Melinda A.  
8 <120> TITLE OF INVENTION: A Gene Differentially Expressed in Breast and  
9 Bladder Cancer, and Encoded Polypeptides  
11 <130> FILE REFERENCE: 1821.0040001  
13 <140> CURRENT APPLICATION NUMBER: 09/824,787B  
14 <141> CURRENT FILING DATE: 2001-04-04  
16 <150> PRIOR APPLICATION NUMBER: 60/194,463  
17 <151> PRIOR FILING DATE: 2000-04-04  
19 <160> NUMBER OF SEQ ID NOS: 147  
21 <170> SOFTWARE: PatentIn Ver. 2.1  
23 <210> SEQ ID NO: 1  
24 <211> LENGTH: 354  
25 <212> TYPE: DNA  
26 <213> ORGANISM: Homo sapiens  
28 <220> FEATURE:  
29 <221> NAME/KEY: CDS  
30 <222> LOCATION: (7)..(354)  
32 <400> SEQUENCE: 1  
33 gccgatgagcgggagccggcaggacgtccgtatgcggcccccctccc 48  
34 Met Ser Gly Glu Pro Gly Gln Thr Ser Val Ala Pro Pro Pro  
35 1 5 10  
37 gag gag gtc gag ccg agt ggg gtc cgc atc gtg gtg gag tac tgt 96  
38 Glu Glu Val Glu Pro Gly Ser Gly Val Arg Ile Val Val Glu Tyr Cys  
39 15 20 25 30  
41 gaa ccc tgc ggc ttc gag gcg acc tac ctg gag ctg gcc agt gct gtg 144  
42 Glu Pro Cys Gly Phe Glu Ala Thr Tyr Leu Glu Leu Ala Ser Ala Val  
43 35 40 45  
45 aag gag cag tat ccg ggc atc gag atc gag tcg cgc ctc ggg ggc aca 192  
46 Lys Glu Gln Tyr Pro Gly Ile Glu Ile Glu Ser Arg Leu Gly Thr  
47 50 55 60  
49 ggt gcc ttt gag ata gag ata aat gga cag ctg gtg ttc tcc aag ctg 240  
50 Gly Ala Phe Glu Ile Glu Ile Asn Gly Gln Leu Val Phe Ser Lys Leu  
51 65 70 75  
53 gag aat ggg ggc ttt ccc tat gag aaa gat ctc att gag gcc atc cga 288  
54 Glu Asn Gly Phe Pro Tyr Glu Lys Asp Leu Ile Glu Ala Ile Arg  
55 80 85 90  
57 aga gcc agt aat gga gaa acc cta gaa aag atc acc aac agc cgt cct 336  
58 Arg Ala Ser Asn Gly Glu Thr Leu Glu Lys Ile Thr Asn Ser Arg Pro  
59 95 100 105 110  
61 ccc tgc gtc atc ctg tga 354  
62 Pro Cys Val Ile Leu  
63 115  
66 <210> SEQ ID NO: 2  
67 <211> LENGTH: 115  
68 <212> TYPE: PRT

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/824,787B

DATE: 11/12/2001

TIME: 18:33:38

Input Set : A:\seqlist\_1821\_0040001.txt  
 Output Set: N:\CRF3\11122001\I824787B.raw

69 <213> ORGANISM: Homo sapiens  
 71 <400> SEQUENCE: 2  
 72 Met Ser Gly Glu Pro Gly Gln Thr Ser Val Ala Pro Pro Pro Glu Glu  
 73 1 5 10 15  
 74 Val Glu Pro Gly Ser Gly Val Arg Ile Val Val Glu Tyr Cys Glu Pro  
 75 20 25 30  
 76 Cys Gly Phe Glu Ala Thr Tyr Leu Glu Leu Ala Ser Ala Val Lys Glu  
 77 35 40 45  
 78 Gln Tyr Pro Gly Ile Glu Ile Glu Ser Arg Leu Gly Gly Thr Gly Ala  
 79 50 55 60  
 80 Phe Glu Ile Glu Ile Asn Gly Gln Leu Val Phe Ser Lys Leu Glu Asn  
 81 65 70 75 80  
 82 Gly Gly Phe Pro Tyr Glu Lys Asp Leu Ile Glu Ala Ile Arg Arg Ala  
 83 85 90 95  
 84 Ser Asn Gly Glu Thr Leu Glu Lys Ile Thr Asn Ser Arg Pro Pro Cys  
 85 100 105 110  
 86 Val Ile Leu  
 87 115  
 90 <210> SEQ ID NO: 3  
 91 <211> LENGTH: 518  
 92 <212> TYPE: DNA  
 93 <213> ORGANISM: Homo sapiens  
 95 <400> SEQUENCE: 3  
 96 gggccgcgat gagcgttagcc gggggcagacg tccgtagcgc cccctcccgaa ggagggtcgag 60  
 97 ccggggcagtggatggatggcat cgtgggtggat tactgtgaac cctgcggcgtt cgaggcgacc 120  
 98 tacctggagctggcccaatgc tggcaaggatc cagttatccgg gcatacgatcgat cgagtcgcgc 180  
 99 ctcggggggca caggtgcgtt gagatagaga taaatggaca gctgggtgttc tccaagctgg 240  
 100 agaatgggggg ctcccttat gagaaagatc tcattgaggc catccgaaga gccagtaatg 300  
 101 gagaaaacctt agaaaaagatc accaacacggcc gtcctccctg cgtcatccctg tgactgcaca 360  
 102 ggactctggg ttccctgtct gttctgggtt ccaaaccctt gtcctccctt ggtccctgttg 420  
 103 ggagctcccc tgccttttcc acctacttag ctcccttagca aagagacact ggcctccact 480  
 104 ttgcccttttggtacaaaga aggaatagaa gattccgt 518  
 107 <210> SEQ ID NO: 4  
 108 <211> LENGTH: 621  
 109 <212> TYPE: DNA  
 110 <213> ORGANISM: Homo sapiens  
 112 <220> FEATURE:  
 113 <221> NAME/KEY: misc\_feature  
 114 <222> LOCATION: (14)..(15)  
 115 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c  
 117 <220> FEATURE:  
 118 <221> NAME/KEY: misc\_feature  
 119 <222> LOCATION: (24)..(24)  
 120 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c  
 122 <220> FEATURE:  
 123 <221> NAME/KEY: misc\_feature  
 124 <222> LOCATION: (28)..(28)  
 125 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c  
 127 <220> FEATURE:

RAW SEQUENCE LISTING DATE: 11/12/2001  
 PATENT APPLICATION: US/09/824,787B TIME: 18:33:38

Input Set : A:\seqlist\_1821 0040001.txt  
 Output Set: N:\CRF3\11122001\I824787B.raw

```

128 <221> NAME/KEY: misc_feature
129 <222> LOCATION: (31)..(31)
130 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
132 <220> FEATURE:
133 <221> NAME/KEY: misc_feature
134 <222> LOCATION: (33)..(33)
135 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
137 <220> FEATURE:
138 <221> NAME/KEY: misc_feature
139 <222> LOCATION: (491)..(491)
140 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
142 <220> FEATURE:
143 <221> NAME/KEY: misc_feature
144 <222> LOCATION: (535)..(535)
145 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
147 <220> FEATURE:
148 <221> NAME/KEY: misc_feature
149 <222> LOCATION: (557)..(557)
150 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
152 <220> FEATURE:
153 <221> NAME/KEY: misc_feature
154 <222> LOCATION: (565)..(565)
155 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
157 <220> FEATURE:
158 <221> NAME/KEY: misc_feature
159 <222> LOCATION: (574)..(574)
160 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
162 <220> FEATURE:
163 <221> NAME/KEY: misc_feature
164 <222> LOCATION: (588)..(588)
165 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
167 <220> FEATURE:
168 <221> NAME/KEY: misc_feature
169 <222> LOCATION: (595)..(595)
170 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
172 <220> FEATURE:
173 <221> NAME/KEY: misc_feature
174 <222> LOCATION: (606)..(606)
175 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
177 <400> SEQUENCE: 4
W--> 178 ggggccccgag cgggnncccag cgatgtgggg nnnccggga cagacgtccg tagcgcgggg 60
179 tccccggagg gtcggagccgg gcggatgggtt ccgcattgtgt gtggaggact gtgaaccctg 120
180 cggcttcgag gctacctacc tggagctggc cagtgtgtgt aaggagcagt atccgggcat 180
181 cgagatcgag tcgcgcctcg ggggcacagg tgcttgaga tagagataaa tggacagctg 240
182 gtgttctcca agctggagaa tgggggctt ccctatgaga aagatctcat tgaggccatc 300
183 cgaagagcca gtaatggaga aaccctagaa aagatcacca acaagccgt cctcccttgc 360
184 gtcatcctgt gacttgcaca ggactctggg gttcctgtc tttctgggg gtccaaacct 420
185 tggtctccct ttggcctgc tggagctc cccctgcctc tttcccctaa ttagcttta 480
W--> 186 agcaaagaga ncctggcctc caatttgcctt tttgggtaca aagaaggaat agaamatccg 540

```

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/824,787B

DATE: 11/12/2001  
TIME: 18:33:38

Input Set : A:\seqlist\_1821 0040001.txt  
Output Set: N:\CRF3\11122001\I824787B.raw

W--> 187 tggccttggg gaaggaaaa aaatnccat aaantttca ggcaactnaa acconttcca 600  
W--> 188 gttaantccc agaaaaccaa t 621  
191 <210> SEQ ID NO: 5  
192 <211> LENGTH: 683  
193 <212> TYPE: DNA  
194 <213> ORGANISM: Homo sapiens  
196 <220> FEATURE:  
197 <221> NAME/KEY: misc\_feature  
198 <222> LOCATION: (608)..(608)  
199 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c  
201 <400> SEQUENCE: 5  
202 gagccggggc agacgtccgt agcgccccct cccgaggagg tcgagccggg cagtggggtc 60  
203 cgcacatcggtgg tggagtagt gtaaccctgc ggcttcgagg cgacacctt ggagctggcc 120  
204 agtgctgtga aggagcagta tccgggcatc gagatcgagt cgccgcctcgg gggcacaggt 180  
205 gcctttgaga tagagataaa tggacagctg gtgttctcca agctggagaa tgggggcttt 240  
206 ccctatgaga aagatctcat tgaggccatc cgaagagcca gtaatggaga aaccctagaa 300  
207 aagatcacca acagccgtcc tccctgcgtc atcctgtgac tgcacagagac tctgggttcc 360  
208 tgctctgttc tggggtccaa accttggct cccttggcgt ctgctggag ctccccctgc 420  
209 ctctgtcccc tacttagctc tttagcaaag agacccctggc ctccacttg cccttgggt 480  
210 acaaagaagg aatagaagat tccgtggct tggggcagg agagagacac tctccatgaa 540  
211 cacttctcca gccacctcat acccccttcc cagggtaagt gcccacgaaa gcccagtcca 600  
W--> 212 ctcttc~~net~~ cggtaataacc tgtctgatgc cacagattt atttattctc ccctaaccua 660  
213 gggcaatgtc agctattgcc agt 683  
216 <210> SEQ ID NO: 6  
217 <211> LENGTH: 490  
218 <212> TYPE: DNA  
219 <213> ORGANISM: Homo sapiens  
221 <220> FEATURE:  
222 <221> NAME/KEY: misc\_feature  
223 <222> LOCATION: (12)..(12)  
224 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c  
226 <220> FEATURE:  
227 <221> NAME/KEY: misc\_feature  
228 <222> LOCATION: (17)..(17)  
229 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c  
231 <220> FEATURE:  
232 <221> NAME/KEY: misc\_feature  
233 <222> LOCATION: (23)..(24)  
234 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c  
236 <220> FEATURE:  
237 <221> NAME/KEY: misc\_feature  
238 <222> LOCATION: (65)..(67)  
239 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c  
241 <220> FEATURE:  
242 <221> NAME/KEY: misc\_feature  
243 <222> LOCATION: (432)..(432)  
244 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c  
246 <220> FEATURE:  
247 <221> NAME/KEY: misc\_feature

## RAW SEQUENCE LISTING

DATE: 11/12/2001

PATENT APPLICATION: US/09/824,787B

TIME: 18:33:38

Input Set : A:\seqlist\_1821 0040001.txt  
 Output Set: N:\CRF3\11122001\I824787B.raw

```

248 <222> LOCATION: (454)..(454)
249 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
251 <220> FEATURE:
252 <221> NAME/KEY: misc_feature
253 <222> LOCATION: (461)..(461)
254 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
256 <220> FEATURE:
257 <221> NAME/KEY: misc_feature
258 <222> LOCATION: (490)..(490)
259 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
261 <400> SEQUENCE: 6
W--> 262 gattcggcac gnggggagg gatngggcga gacgtccgta gcgcccccctc ccgaggaggt 60
W--> 263 cgacnnggc agtggggtcc gcatcgtgg ggagactgt gaaccctgcg gcttcgaggc 120
  264 gacctactg gagctggcca gtgctgtgaa ggagcagtat cggggcatcg agatcgagtc 180
  265 ggcgcctcgggg ggcacaggtg ctttgagata gagataatg gacagctggtgt gttctccaag 240
  266 ctggagaatg ggggctttcc ctatgagaaa gatctcattg aggccatccg aagaagccag 300
  267 taatggagaa accctagaaa agatcaccaa caagccccgtc ctccctgcgt catccctgtga 360
  268 ctgcacagga ctctgggttc ctgctctgtt ctggggtcca aacttgttc tcccttggt 420
W--> 269 cctgctggga gnccccctg cctctttccc ctanttagct nettagcaaa gagaccctgg 480
W--> 270 cctccactt
  273 <210> SEQ ID NO: 7
  274 <211> LENGTH: 557
  275 <212> TYPE: DNA
  276 <213> ORGANISM: Homo sapiens
  278 <220> FEATURE:
  279 <221> NAME/KEY: misc_feature
  280 <222> LOCATION: (28)..(28)
  281 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
  283 <220> FEATURE:
  284 <221> NAME/KEY: misc_feature
  285 <222> LOCATION: (504)..(504)
  286 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
  288 <220> FEATURE:
  289 <221> NAME/KEY: misc_feature
  290 <222> LOCATION: (527)..(527)
  291 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
  293 <220> FEATURE:
  294 <221> NAME/KEY: misc_feature
  295 <222> LOCATION: (545)..(545)
  296 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
  298 <400> SEQUENCE: 7
W--> 299 cgtccgtagc gccccctccc gaggaggt gacccgggca gtggggtcccatcgtggtg 60
  300 gagtactgtg aaccctgcgg cttcgaggcg acctactgg agctggccag tgctgtgaag 120
  301 gagcagttac cgggcatcga gatcgagtc cgcctcgggg gcacaggtgc tttgagatag 180
  302 agataatgg acagctggtg ttctccaagc tggagaatgg gggctttccc tatgagaaaag 240
  303 atctcattga ggccatccga agagccagta atggaagaaa ccctagaaaa gatcaccaac 300
  304 agccgtcctc ccttgcgtca tcctgtgact tgcacaggac tctgggtcc tgctctgttc 360
  305 ttggggtcca aacttgtgtt ctccctttgg tcctgctggt aagctcccctgcctcttt 420
  306 cccctactta agctcctta gcaaagaaga acctgggct tccactttg ccctttggt 480

```

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/824,787B

DATE: 11/12/2001  
TIME: 18:33:39

Input Set : A:\seqlist\_1821 0040001.txt  
Output Set: N:\CRF3\11122001\I824787B.raw

L:178 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:186 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:187 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:188 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:262 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:263 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:307 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:308 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:364 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:465 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13  
L:466 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13  
L:520 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14  
L:528 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14  
L:529 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14  
L:530 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14  
L:584 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15  
L:585 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15  
L:590 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15  
L:624 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:630 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:699 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17  
L:703 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17  
L:704 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17  
L:705 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17  
L:706 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17  
L:720 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18  
L:739 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19  
L:794 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22  
L:845 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:850 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:904 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:905 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:910 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:911 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:937 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25  
L:938 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25  
L:940 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25  
L:964 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26  
L:970 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26  
L:1014 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27  
L:1019 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27  
L:1020 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27  
L:1021 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/824,787B

DATE: 11/12/2001

TIME: 18:33:39

Input Set : A:\seqlist\_1821 0040001.txt

Output Set: N:\CRF3\11122001\I824787B.raw

L:1059 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28

L:1061 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28